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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,975	08/26/2003	David K. Platner	60,130-1747; 03MRA0022	6712
26096 7590 03/07/2007 CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			EXAMINER KOTTER, KIP T	
			ART UNIT	PAPER NUMBER
			3617	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/07/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/649,975

Applicant(s)

PLATNER ET AL.

Examiner

Kip Kotter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 28 June 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed June 28, 2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because two of the references are incorrect. It appears that Patent Numbers “US 1,034,999” and “US 4,269,90” should be changed to Patent Numbers – **GB 1,034,999 A**– and – **US 4,269,890** –, respectively. These references have been listed on PTO-892.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “**38**” has been used to designate both “leaf spring” and “cap” in paragraph [21] on page 5.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. **No new matter should be entered.**

Specification

3. The disclosure is objected to because of the following informalities: In paragraph [11], “depict” should be changed to – **depicts** – and in line 8 of paragraph [21], “racket” should be changed to – **bracket** –.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 14, there is insufficient antecedent basis for the limitation “the end of the bag”. Moreover, the claim is rendered indefinite as it is unclear how the bag can be closed and inserted into the cavity following the completion of steps a), b) and c) as set forth in claim 11. Also, the claim is rendered indefinite because it is unclear whether the entire bag is inserted into the cavity or only the end of the bag is inserted into the cavity.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5, 11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Simca Automobiles (GB 1034999 A).

Regarding claims 1-5, Simca Automobiles discloses a reinforced structural member comprising: a hollow structure 1 defining a cavity as shown in Fig. 1; a bag 4 disposed within said cavity defining a space; and a material disposed within said bag filling said space as described in lines 19-24 on page 2, wherein said structure includes a hole 3 and said bag includes a compressed size equal to or smaller than said hole facilitating insertion of said bag into said cavity as shown in Fig. 1 and described in lines 6-12 on page 2; wherein a cap 9 is installed in said hole enclosing said cavity as shown in Fig. 4; wherein said bag includes an end 6 having an opening facilitating insertion of said material into said bag as shown in Fig. 2; and wherein said end is disposed within said cavity as shown in Fig. 3 and Fig. 4.

Regarding claims 11, 13 and 14, Simca Automobiles discloses a method of locally reinforcing a hollow structure comprising the steps of: a) inserting a bag into a cavity of a structure as shown in Fig. 1; b) filling the bag with a material as shown in Fig. 2; and c) expanding the material as shown in Fig 3 and Fig. 4; the bag is closed prior to step c) as described in lines 34-49 on page 2; and the end of the bag is closed and inserted into the cavity as shown in Fig. 3 and described in lines 34-40 on page 2.

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8. Claims 1, 6, 11 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Coon et al. (U.S. Patent No. 7169344 B2).

Regarding claims 1 and 6, Coon et al. discloses a reinforced structural member comprising: a hollow structure **16** defining a cavity **26** as shown in Figs. 1-5; a bag **12** disposed within said cavity defining a space; and a material **14** disposed within said bag filling said space wherein said material is a structural foam as described in column 7, lines 58-60.

Regarding claims 11 and 12, Coon et al. discloses a method of locally reinforcing a hollow structure comprising the steps of: a) inserting a bag into a cavity of a structure as described in column 12, lines 21-27; b) filling the bag with a material as described in column 12, lines 28-32; and c) expanding the material as described in column 12, lines 32-36, wherein the material is a structural foam as described in column 7, lines 58-60.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coon et al. in view of Hilborn et al. (U.S. Patent No. 6348513 B1).

As mentioned above in paragraph 8, Coon et al. discloses the reinforced structural member described in claims 1 and 6. Coon et al., however, fails to disclose expressly that the structural foam is two-part epoxy.

Hilborn et al. teaches a two-part epoxy for use as structural foam as described in column 2, lines 63-66 and column 7, lines 49-51 through column 8, lines 1-2.

At the time of the invention, it would have been obvious to have used a two-part epoxy structural foam, such as taught by Hilborn et al., for the reinforced structural member of Coon et al. to provide a relatively light-weight foam that also increases the strength of the structural member.

11. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coon et al. in view of Wilcox (U.S. Patent No. 4200326).

As mentioned previously, Coon et al. discloses the reinforced structural member described in claim 1. However, Coon et al. does not disclose expressly that the reinforced structural member is an axle with a suspension component being secured to the axle proximate to the material.

Regarding claim 8, Wilcox teaches an axle that is reinforced with structural foam as shown in Fig. 1.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have employed the reinforced structural member assembly of Coon et al. to reinforce an axle with structural foam, such as taught by Wilcox, to provide an inexpensive means to strengthen the axle while minimizing the weight.

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Regarding claim 9, it would have been obvious that a suspension component is secured to the axle of Wilcox proximate the material because it is inherent that a suspension component would be secured to an axle.

12. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simca Automobiles.

Regarding claim 15 and as mentioned above in paragraph 7, Simca Automobiles discloses the method of locally reinforcing a hollow structure described in claim 11. Simca Automobiles, however, fails to disclose the installing of the cap into the hole prior to expanding the material.

It would have been obvious to a person of ordinary skill in the art to have installed the cap into the hole prior to expanding the material as a mere matter of choice in the sequence of steps. Inasmuch as the expanding material does not extend beyond the hole when the material is fully expanded, the choice of when to install the cap would not be critical for the locally reinforced hollow structure of Simca Automobiles. Moreover, the applicant has stated no criticality for installing the cap into the hole prior to expanding the material.

Regarding claim 16, it would have been obvious that a component is secured to the structure proximate to the material because the locally reinforced hollow structure of Simca Automobiles is used in the body of the car to help form a seal against dust for parts and provide sound insulation.

Allowable Subject Matter

13. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references show other reinforced structural members.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kip Kotter whose telephone number is (571) 272-7953. The examiner can normally be reached on 9:00-4:00pm est.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KTK

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RUSSELL D. STORMER
PRIMARY EXAMINER 3/1/07